10

Amendments to Claims

(Original) A fuel cell assembly having a plurality of fuel cell component elements extending under compressive pressure between a pair of endplates to form a cell stack assembly, and having a reactant gas manifold, said elements having mutually uneven surfaces at ends thereof to which said manifold is to be sealed, and having a first seal part comprising at least one type of elastomer applied to said mutually uneven surfaces;

characterized by the improvement comprising:

a groove disposed within a contact surface of said manifold for receiving an elastomer gasket;

a notch extending from a surface of each of said endplates for receiving an end portion of a rigid strip coplanar with said endplate surface to form a sealing surface of said stack assembly coextensive with and facing said manifold contact surface;

a second seal part comprising an elastomer gasket disposed within said groove of said manifold; and

a third seal part comprising a rigid dielectric strip interposed between said first seal part and said second seal part.

- 2. (Original) An assembly according to claim 1 wherein said rigid strip is an angled corner strip.
- 3. (Original) An assembly according to claim 1 wherein said rigid strip is flat.
- 4. (Original) An assembly according to claim 1 wherein said rigid strip comprises a fiberglass reinforced plastic.

 (Original) An assembly according to claim 1 wherein said rigid strip comprises a polymer-coated metal.

6-9. (Cancelled)

5

- 10. (Currently Amended) A method of sealing a contact surface of a reactant gas manifold to endplates and fuel cell component elements of a fuel cell stack assembly comprising:
 - (a) forming a groove in the contact surface of said manifold;
 - (b) providing an elastomer gasket disposed within said groove;
- (c) providing a notch in a surface of said end plate for receiving a rigid dielectric strip coplanar with said endplate surfaces to form a sealing surface of said stack assembly;
- (d) applying at least one layer of an elastomer to the regions of said fuel
 10 cell elements that are to be sealed to said manifold to provide a surface which is relatively smooth and flat;
 - (e) adhering a rigid dielectric strip to said elastomer layer; and
 - (f) installing said manifold on said fuel cell stack assembly such that its entire contact surface is in direct contact with said sealing surface of said stack assembly, said rigid strip being between said manifold and said silicone rubber elastomer layer.